APPENDIX C

CLARIFICATION OF DATA ITEMS

<u>ITEM</u>	FIGURE(S)	PAGE
Abbreviations		
General Bridge Types	2.01 – 2.15	
Length Measurements	3.1	
Width Measurements	4.1	
Culvert Examples	4.2	c -19
Horizontal Clearance	4.3	C-20
Minimum Vertical Clearance	5.1	c -21
Minimum Vertical Underclearance	6.1	C-22
10-Foot Vertical Clearance	7.1	c-23
Sidewalk Width On	8.1	C-24
Minimum Lateral Underclearance	9.1	C-25
Length of Replaced Bridges	10 1	C-26

Suggested Abbreviations For Descriptive Items

ALT Alternate LN Lane(s) MI ΑV Avenue Mile(s) BL Boulevard Ν North OVR - Over BR Bridge BYP Bypass PΚ Parkway PLCR Circle Place CL Corporate Limit RR Railroad

CO - County RRX - Railroad Crossing

COV - Covered RP - Ramp
CT - Court RV - River
CTY - City RD - Road

DR - Drive RDD - Road District

E East S South FR From ST Street FRNT - Frontage TR Terrace Interstate TWP - Township ILL Illinois UDR - Under JCT Junction W West

The abbreviations for the intermediate compass points may be formed by combining the abbreviations for the cardinal points.

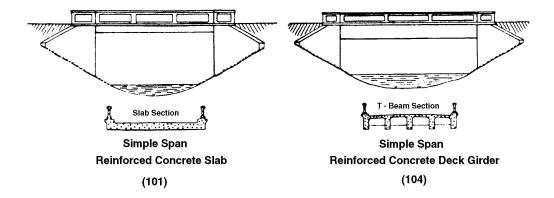
Example: Northeast = NE; South Southwest = SSW.

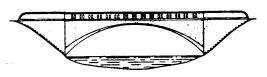
The direction abbreviations can be prefixed to CL to specify a particular corporate limit.

Example: East Corporate Limits = ECL.

Abbreviations for words not on this list may be used, provided their meanings are obvious and not easily confused with others.

Concrete Bridge Types





Filled Spandrel Concrete Arch (111)



Open Spandrel Concrete Arch (125)

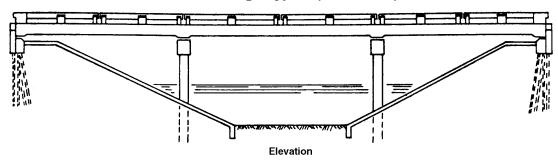


Rigid Frame Concrete (107)

3-Sided Structure Precast Concrete Not Prestressed (A07)

Note: Coding for items 43 & 44 indicated in parentheses on Figures 2.01-2.12

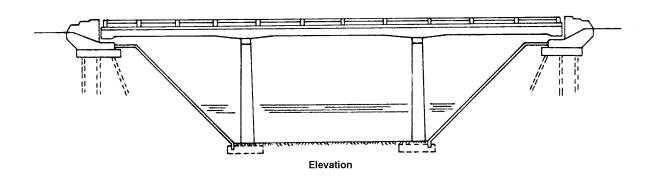
Concrete Bridge Types (Continued)

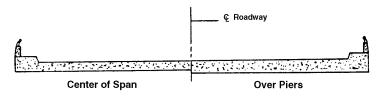




Cross Section

Continuous R.C. Slab (201)





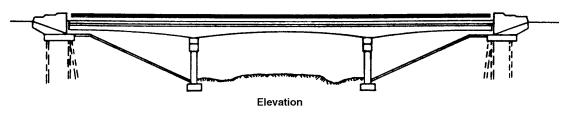
Cross Section

Continuous R.C. Slab

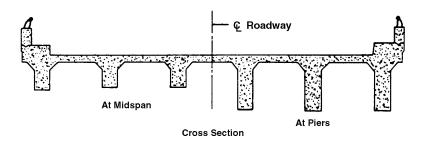
(Haunched) (201)

Figure 2.02

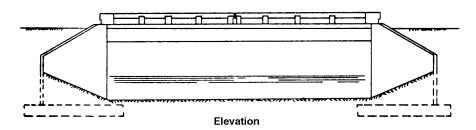
Concrete Bridge Types (Continued)

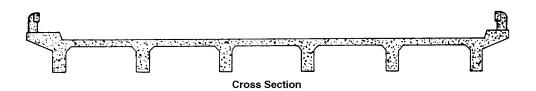


(3 Span Continuous)



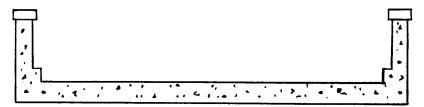
Continuous R.C. Deck Girder (Haunched) (204)



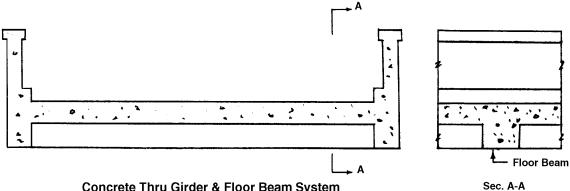


Simple Span R.C. Deck Girder (104)

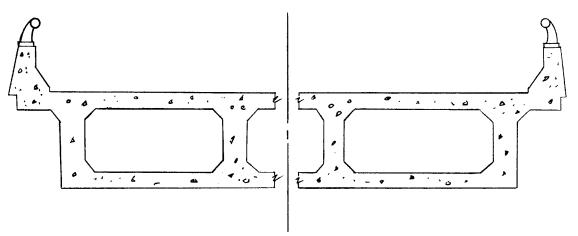
Concrete Bridge Types (Continued)



Concrete Thru Girder Without Floor Beam System
Simple Span (124)
Continuous Span (224)



Concrete Thru Girder & Floor Beam System
Simple Span (103)
Continuous Span (203)

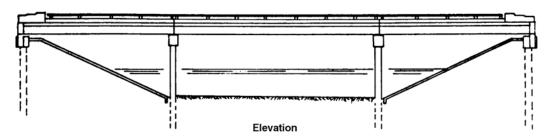


Cast-In-Place R.C. Box Girder

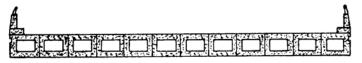
Simple Span (105) Continuous Span (205)

Figure 2.04

Concrete Bridge Types (Continued)

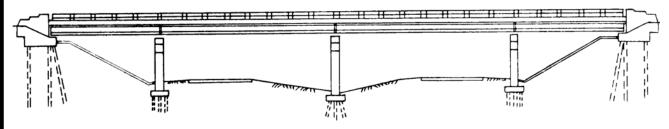


Note: These are simple spans

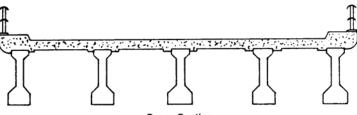


Cross Section

Precast Prestressed Concrete Deck Beams (505)



Elevation

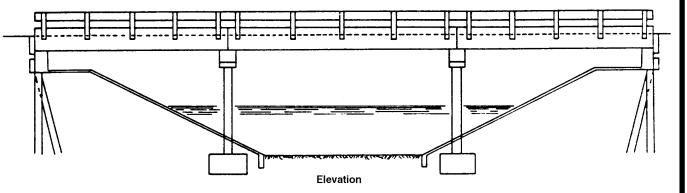


Cross Section

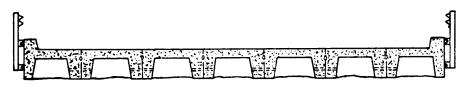
Precast Prestressed Concrete I-Beams Simple Span (502) Continuous Spans (602)

Figure 2.05

Concrete Bridge Types (Continued)



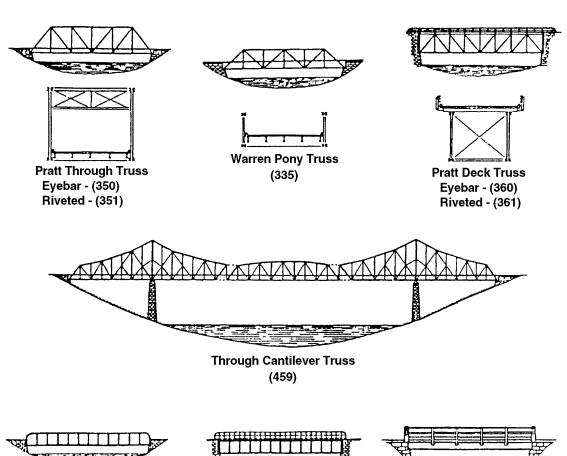
Note: These are simple spans

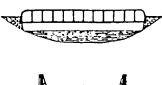


Cross Section

Precast (Non-Prestressed) Concrete Bridge Slab (A29)

Steel Bridge Types

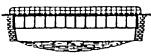




Simple Span

Through Girder

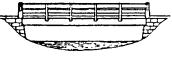
(324)





Simple Span

Deck Girder (W/Floor Beam System) (303)





Simple Span Multi-Beam (No Floor Beam System)

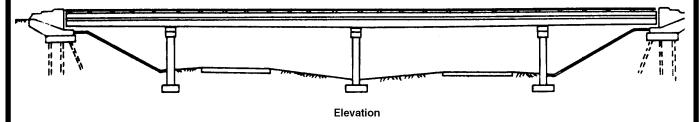
(302)

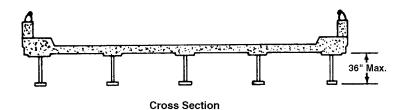


Suspension (313)

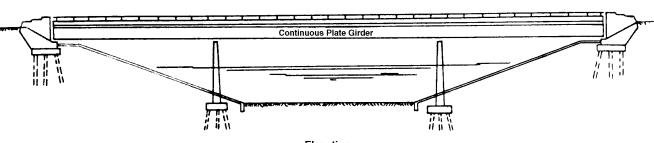
Figure 2.07

Steel Bridge Types (Continued)

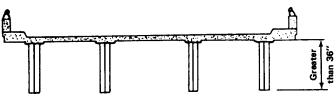




Continuous Steel Stringer (402)



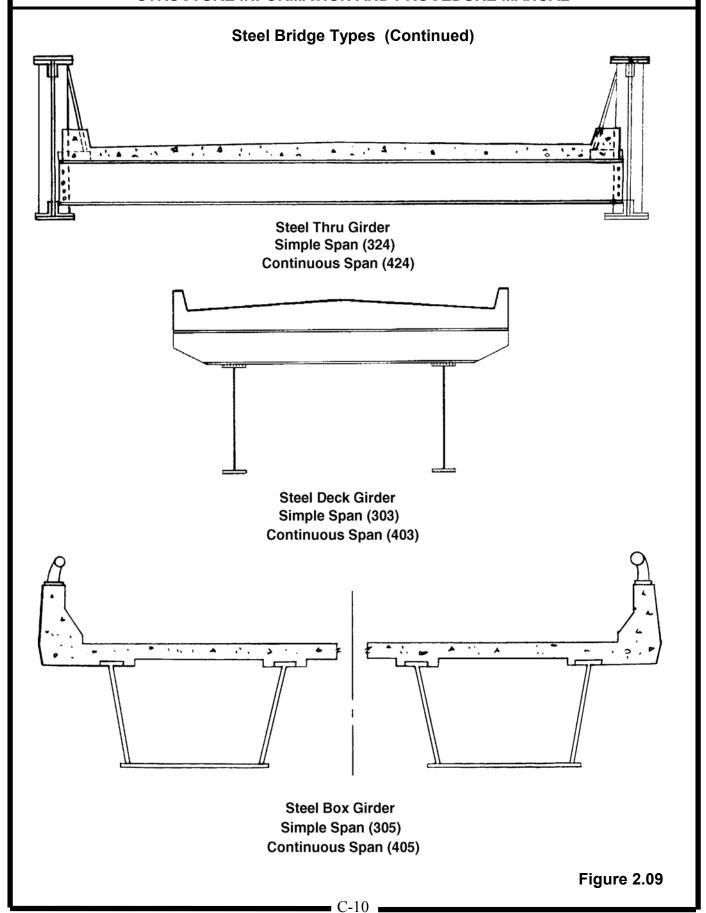




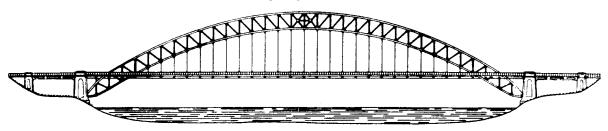
Cross Section

Continuous Steel Plate Girder-(4 or more girders) (402)

Figure 2.08

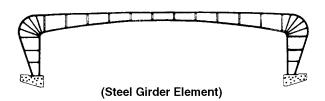


Steel Bridge Types (Continued)



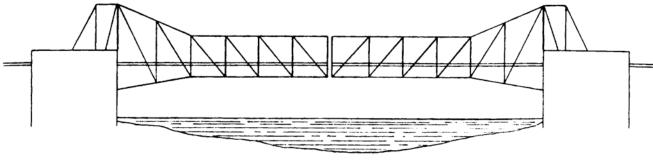
Through -Arch Truss (312)



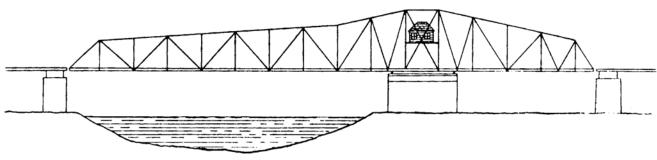


Rigid Frame-Steel (307)

Movable Bridge Types



Bascule (316)



Rotary-Swing (317)

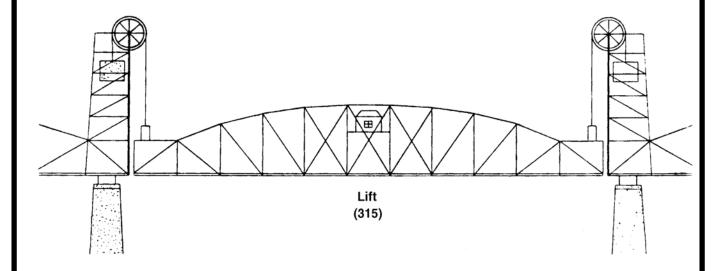
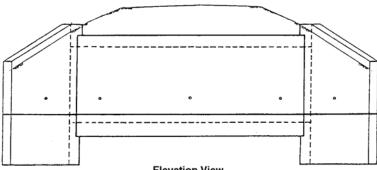
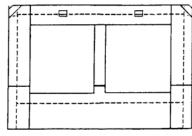


Figure 2.11

Culvert Types

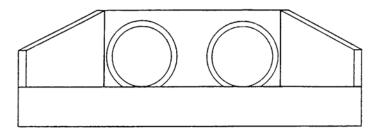


Elevation View



End View

Cast-In-Place Concrete Multiple Box Culvert (219)
Precast Concrete Box Culverts (A19)

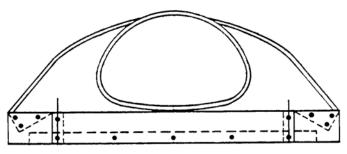


Precast Concrete Pipe Culverts (A19)

Metal Pipe Culverts

Steel (319)

Aluminum (919)

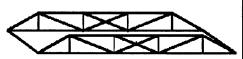


Corrugated Metal Plate Pipe Arch Steel (319) Aluminum (919)

Figure 2.12

TRUSS TYPES

THERE ARE 3 TRUSS CATEGORIES



PONY TRUSS

STRUCTURE TYPE CODING 30 THRU 44

DECK ON FLOOR BEAMS SPANNING
BETWEEN LOWER PANEL POINTS.
NO TOP LATERAL NEWBERS.
SHORT SPANS (< 80°)



STRUCTURE TYPE CODING 45 THRU 59

DECK ON FLOOR BEAMS BETWEEN
LOWER PANEL POINTS.
TOP CHORDS BRACED BY LATERAL WEMBERS.
LONG SPAMS WSUALLY>807



DECK TRUSS

STRUCTURE TYPE CODING 60 THRU 69
DECK ON FLOOR BEAMS SPANNING BETWEEN
UPPER PANEL POINTS. TRUSS IS NOSTLY
BELON THE DECK SURFACE.



WARREN

(335)

TRIANGULAR IN OUTLINE THE DIAGONALS
CARRY BOTH COMPRESSIVE AND TENSILE
FORCES. A "TRUE" WARREN TRUSS HAS
EQUILATERAL TRIANGLES WITH NO YERTICALS.
LENGTH: 80 - 400 FEET
15 - 120 METERS



(330, 331, 350, 351)

DIAGONALS IN TEMSION, VERTICALS IN COMPRESSION, EXCEPT FOR HIP VERTICALS ADJACENT TO INCLINED END POSTS).

LENGTH 25 - 150 FEET 8 - 45 NETERS



PRATT HALF-HIP

(332)

A PRATT WITH INCLUDED END POSTS THAT DO NOT HORIZONTALLY EXTEND THE LENGTH OF A FULL PANEL. NO HIP VERTICAL. LENGTH. 30 - 150 FEET

9 - 45 WETERS



TRUSS LEG BEDSTEAD

(333, 334)

A PRATT WITH YERTICAL END POSTS.

LENGTH 50 - 100 FEET 9 - 50 METERS



(336)

DIAGONALS CARRY BOTH COMPRESSIVE AND TENSILE FORCES. VERTICALS SERVE AS BRACING FOR TRIANGULAR NEW SYSTEM. LENGTH: 50 - 400 FEET

15 - 120 WETERS

TRUSS TYPES



DOUBLE INTERSECTION WARREN

&ATTICE)

(337)

WITH OR WITHOUT VERTICALS.

LENGTH 75 - 400 FEET 23 - 120 WETERS



(338,738)

A LENGTHENED YERSION OF THE KING POST.

LENGTH 20 - 80 FEET 6 - 24 WETERS



(354, 355)

A PARKER WITH A POLYGOHAL TOP CHORD OF EXACTLY FIVE SLOPES. LENGTH 100 - 300 FEET

30 - 90 WETERS



DOUBLE INTERSECTION PRATT

(356)

OWNIPPLE, WHIPPLE-MARPHY, LIKYILLE) AN INCLINED END POST PRATT WITH DIAGONALS THAT EXTEND ACROSS THO PANELS. LENGTH TO - 300 FEET 21 - 90 WETERS



LENGTH 20 - 60 FEET 6 - 18 WETERS



PARKER

(352, 353)

A PRATT WITH A POLYGONAL TOP CHORD.

LENGTH: 40 - 200 FEET 12 - 60 WETERS



CAMELBACK

(354, 355)A PARKER WITH A POLYGONAL TOP CHORD OF EXACTLY FIVE SLOPES.

LENGTH 100 - 300 FEET

30 - 90 WETERS



A. A PARKER WITH SUB - STRUTS. B. A PARKER WITH SUB . TIES. LENGTH 250 - 600 FEET

75 - 180 WETERS

TRUSS TYPES



(370)

1840 - 20TH CENTURY

OFOOD, VERTICALS OF WETAL) DIAGONALS IN COMPRESSION, YERTICALS IN TENSION.

> LENGTH: 30 - 150 FEET 9 - 45 VETERS



TOWN LATTICE

(370)

1820 - LATE 19TH CENTURY (MOOD)

A SYSTEM OF CROSS-HATCHED WOODEN DIAGONALS WITH NO VERTICALS.

> LENGTH: 50 - 220 FEET 15 - 66 WETERS



(370)

1852 - MID-LATE 19TH CENTURY (RARE) YERTICALS IN COMPRESSION, DIAGONALS IN TENSION. DIAGONALS RUN FROM END POSTS TO EVERY PANEL POINT.

LENGTH: 75 - JOO FEET 23 - 30 WETERS



(370)

1804 - LATE 19TH CENTURY (NOOD) COMBINATION OF A WOODEN ARCH WITH A WILTIPLE KING POST. (ARCH ALSO CON-BINED WITH LATER WOODEN TRUSSES).

LENGTH: 50 - 175 FEET 15 - 50 WETERS



(370)

LATE 19TH CENTURY A VARIATION ON THE PRATT WITH ADDITIONAL DIAGONALS RUNNING FROM UPPER CHORD PANEL POINTS TO THE CENTER OF THE LOWER CHORDS.

LENGTH: 75 - 150 FEET 25 - 30 WETERS



FINK

(370)

1851 - LATE 19TH CENTURY (RARE)

VERTICALS IN COMPRESSION DIAGONALS IN TENSION, LONGEST DIAGONALS RUN FROM END POSTS TO CENTER PANEL POINTS.

LENGTH: 75 - 100 FEET 23 - 45 WETERS



(370)

1840 - LATE 19TH CENTURY

A TIED ARCH WITH THE DIAGONALS SERVING AS BRACING AND THE VERTICALS SUPPORTING THE DECK.

> LENGTH: 70 - 175 FEET 21 - 50 WETERS

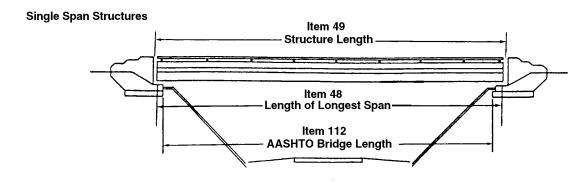


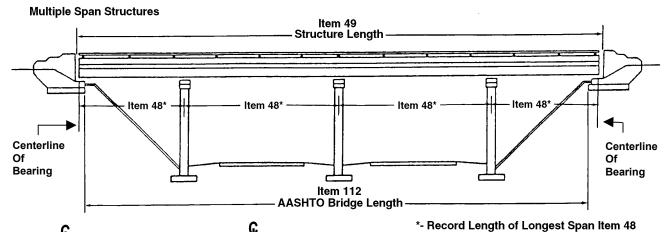
(370)1871 - EARLY 20TH CENTURY

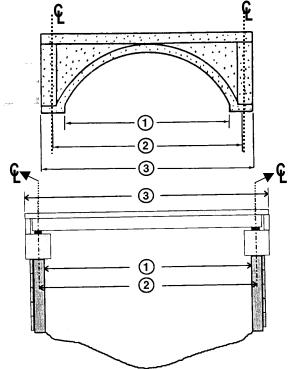
A. A PRATT WITH SUB - STRUTS. B. A PRATT WITH SUB - TIES. LENGTM 250 - 600 FEET

75 - 180 HETERS

Length Measurements





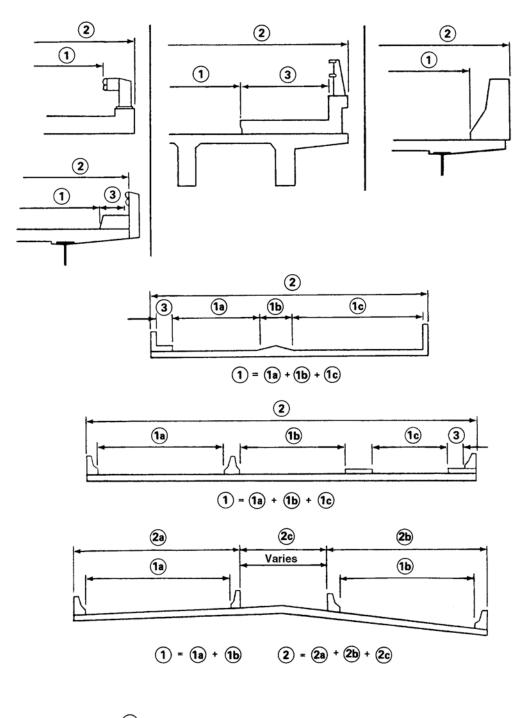


3

- 1 Item 112 (AASHTO Bridge Length)
- 2 Item 48 (Length of Longest Span)
- 3 Item 49 (Structure Length)

Figure 3.1

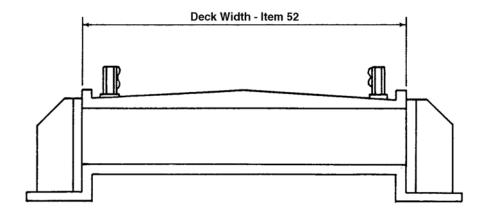
Width Measurements



- 1 Item 51 Bridge Roadway Width, Curb to Curb
- (2) Item 52 Deck Width, Out to Out
- 3 Item 50 Curb or Sidwalk Width

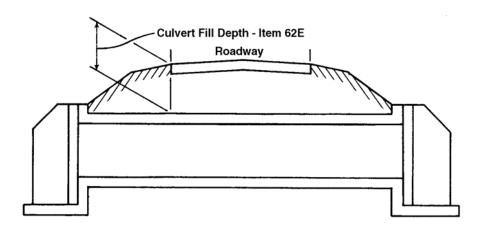
Figure 4.1

Culvert Examples



Culvert Not Under Fill

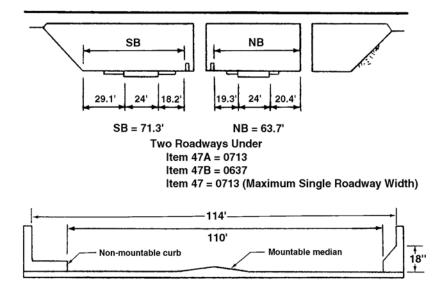
Note: Fill Depth (Item 62E) Code 00.0



Culvert Under Fill

Note: Deck Width (Item 52) Code 000.0

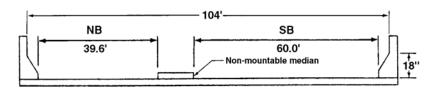
Horizontal Clearance



One Roadway On

Item 47A = 1140 Item 47B = Leave Blank

Item 47 = 1100 (Maximum Single Roadway Width)

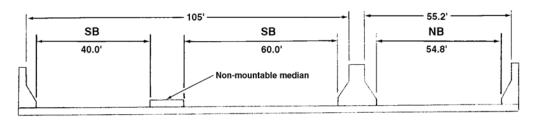


Two Roadways On

Item 47A = 1040

Item 47B = Leave Blank

Item 47 = 0600 (Maximum Single Roadway Width)



More Than Two Roadways On

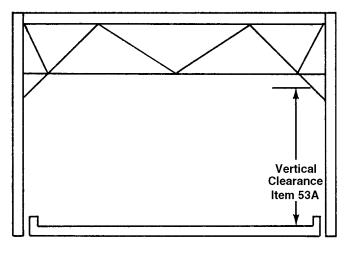
Item 47A = 1050

Item 47B = 0552

Item 47 = 0600 (Maximum Single Roadway Width)

Figure 4.3

Minimum Vertical Clearance



One Opening

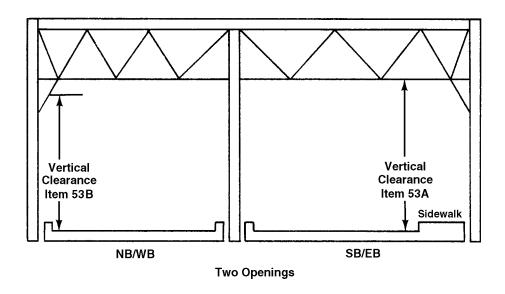
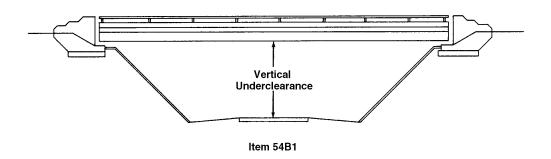
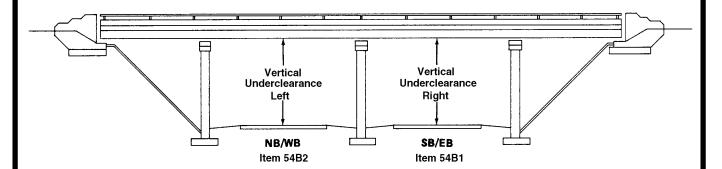


Figure 5.1

Minimum Vertical Underclearance





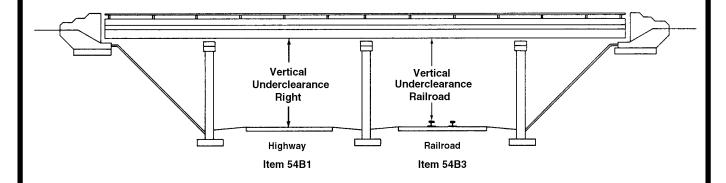
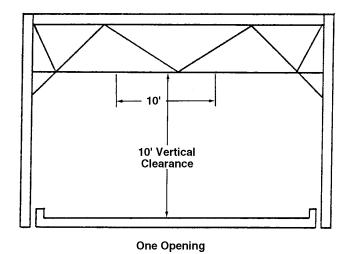
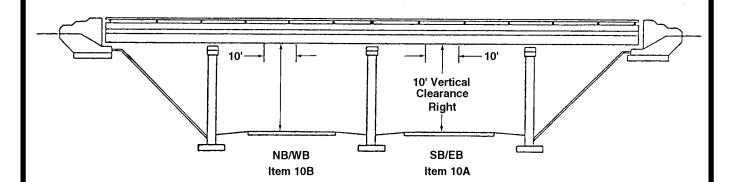


Figure 6.1

10 Foot Vertical Clearance





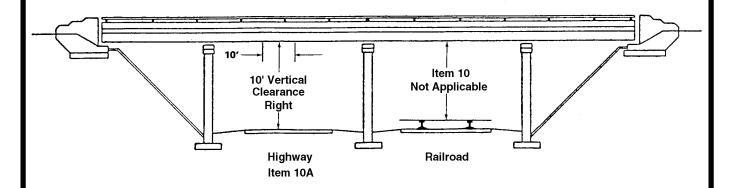
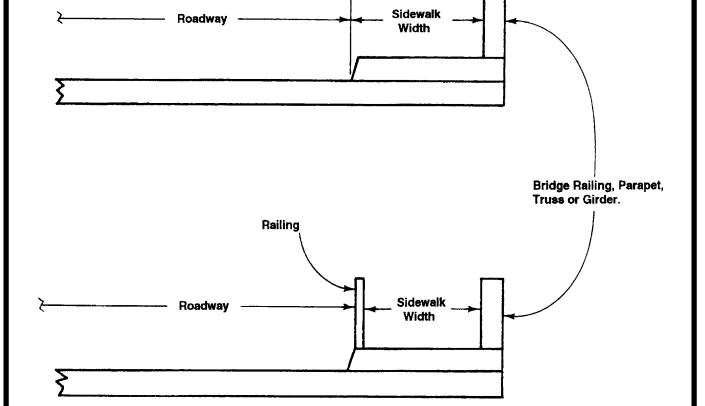
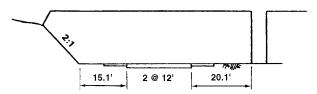


Figure 7.1

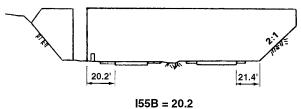
Sidewalk Width On Structure



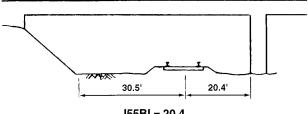
Minimum Lateral Underclearance



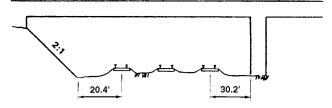
155B = 15.1I56 (Leave Blank) For 2-Way Traffic 156 = 15.1For 1-Way Traffic I55BI = Leave Blank



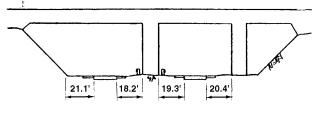
156 = 999I55BI = Leave Blank



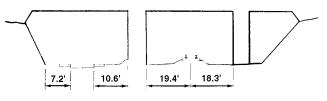
155BI = 20.4



I55B & I56 = Leave Blank 155BI = 20.4



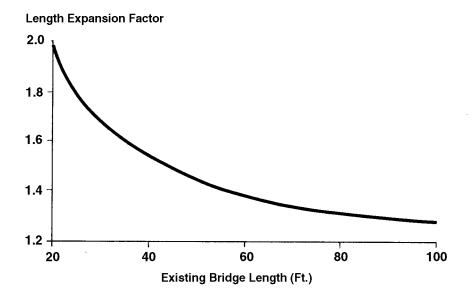
155B = 20.4156 = 18.2I55BI = Leave Blank



155B = 07.2I55BI = 18.3 I56 = Leave Blank

Increased Length of Replaced Bridges

Replaced Bridge Length = Existing Bridge Length x Length Expansion Factor



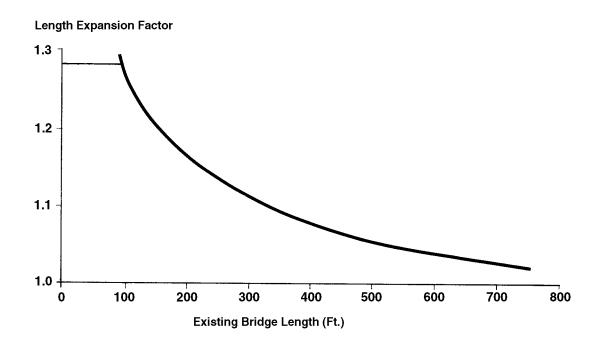


Figure 10.1